



# CITISYSTEM 4<sup>th</sup> Newsletter

## Supporting cities in sustainable biobased systemic change

Biowaste is one of the largest material flows in European cities. A central concern is how to utilise bioresources and biomass in a circular way.

According to the waste hierarchy, after prevention; re-use, recycling, and energy use are the preferred options, however, quite a large amount of biobased waste is disposed. Biowaste has a high potential for contributing to circularity, delivering valuable soil-improving materials, fertiliser, and biogas. With a share of 34%, biowaste is the largest single component of municipal waste in the EU. Recycling of biowaste is key to meeting the EU target to recycle 65% of municipal waste by 2035.

Valuable resources for both material, energy and nutrition are lost through under-utilisation of bioresources, e.g., biowaste disposed of in the mixed municipal waste.

The importance of supporting the utilisation and circulation of biobased materials in nutrient and energy loops is more important than ever. Involved project partners share the desire to develop circular bioeconomy on system and stakeholder levels in cities. Systemic solutions include effective and innovative ways to organise the policies to support circular bioeconomy, circulation of bioresources, separate biowaste collection and processing, as well as the most effective utilisation of biowaste.

**Lead partner:**

LAB University of Applied Sciences

**Collaborating with:**

- City of Lahti (Finland)
- Technical University of Košice (Slovakia)
- BSC, Business support centre L.t.d., Kranj (Slovenia)
- City of Mechelen (Belgium)
- Regional Development Fund of Central Macedonia (Greece)
- CERCA Institute-Catalan Research Centres Institute (Spain) (until 31.8.2024)
- IRTA Institute - Catalan Institute of Agrifood Research and Technology (Spain) (from 1.9.2024).

**The total budget** of the EU Interreg Europe co-funded project is 1 473 301 €, 1 178 640,80 ERDF

**The project lasts** four years (core phase 2023–2026 and follow-up 2026–2027).



# Terminology

## Supporting cities in sustainable biobased systemic change

- "Sustainable development is development that meets the needs of the present, without compromising the ability of future generations to meet their own needs."
- Environmental, Economic, Social, Cultural

Source; World Commission on Environment and Development: Brundtland's report, un.org, europa.eu

## Biobased products

- are wholly or partly derived from materials of biological/living origin

Source: environment.ec.europa.eu

## System level or systemic

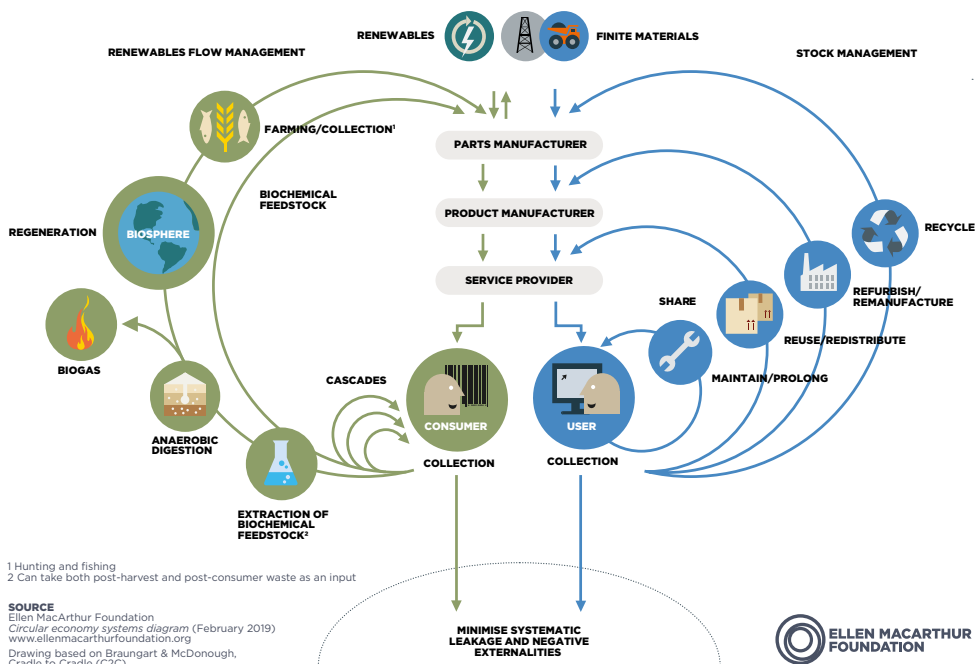
- addressing the root causes, rather than the symptoms
- fundamental, affecting the whole system
- simultaneous change of operating models, structures and their interactions, which creates conditions for future sustainable development

Source: eea.europa.eu, ilo.org, sitra.fi

# CITISYSTEM partner map



## What do we mean with biobased materials?



## INTERREGIONAL MEETING

# CITISYSTEM's 4<sup>th</sup> Interregional Meeting in Kranj, Slovenia

Picture: Alexandra Maksheeva



CITISYSTEM project held its fourth Interregional meeting in Kranj, Slovenia on November 4–6, 2024, bringing together partners and stakeholders from six countries to discuss good practices in community-level biobased circularity solutions.

The meeting started with Steering Group meeting on 4<sup>th</sup> of November at the premises of the first Zero waste hotel in the Gorenjska region of Slovenia – Ribno Alpine Hotel Bled. During the Steering group meeting, the general project matters as well as dissemination strategy were discussed.

On November 5<sup>th</sup>, the CITISYSTEM team continued with participation in the conference in Kranj, where the project participants and local stakeholders were welcomed by Janez Černe, vice mayor of City community Kranj and Katerina Medkova, Lead partner of the CITISYSTEM project. Greetings were followed by the moderated round table on the topic of “Biobased circular economy national framework”, with presentations from:

- **Dr. Andrej Pristovnik**, Ministry for the Environment of Slovenia, Climate and Energy
- **Bojan Pahor**, Expert Advisor at Saubermacher Slovenia
- **Matjaž Bercon**, Managing Director of Communal Company Kranj
- Borderless ecologists **Jaka Kranjc** and **Katja Sreš**, who presented good practices from Slovenia and moderated the round table.

The round table was followed by the presentations on current policy development situations in the CITISYSTEM project partners’ regions.

### Summary of the presentations

[https://www.interregeurope.eu/sites/default/files/2025-02/CITISYSTEM\\_for%20Interreg\\_1.pdf](https://www.interregeurope.eu/sites/default/files/2025-02/CITISYSTEM_for%20Interreg_1.pdf)

Afterwards, the Zero Waste Knowledge sharing workshop on community-level solutions for advancing the Circular economy with guest speakers from Finland and Belgium were presented. The Finnish case of Biowaste management in the city of Lahti was introduced by Kimmo Rinne, Development Manager, Salpakierto. The Belgian case of city of Mechelen titled “From circular strategy to a local bioeconomy practice” was presented by Loes Vandecasteele from the City of Mechelen.

Further on, the CITISYSTEM project participants worked in the groups to discuss good practices about actions of cities/region for inclusion of circularity in everyday life to create a circular community. Examples included household guideline books for Lahti residents, Integrated Recycling centers for Thessaloniki residents, shared economy events like flea markets among Kranj residents and composting experts for homeowners for Mechelen residents.



Afternoon continued with site visits moderated by Matjaž Berčon where partners and stakeholders had an opportunity to visit

- **Re-use workshops and shops in centre of City Kranj** (Vincenc Draksler Foundation)
- **Listen to circularity solutions of Communal company Kranj** – Circular Economy Park ZARTA at Komunala Kranj
- **Re-use centre Zarica, Circular Economy Park ZARTA** at Komunala Kranj (ZARTA - Future Centre of Circularity)
- **Good practice of circularity in gastronomy** in trademark Taste Radolca center presented by House Linhart in Radovljica village.

On November 6<sup>th</sup>, partners and stakeholders continued with the study visit firstly around lake of Bled and Lake Bled Tourist center, where the concept of green sustainable destination, Alpine pearls branding cooperation and selection of local brands with circular elements was presented by Tourism Bled. It was followed by visit of local shop “Na Kilo” without use of packaging. Shop is owned by Agriculture and forestry association Bled and is operating in former gasoline station. The CITISYSTEM team continued the field visits with Visit of Astoria “school hotel” at Higher Vocational Institution for Hospitality, Wellness and Tourism Bled. Educational center presented its good practices of teaching circularity in gastronomy and circularity in practice. The study visit was finished by presentation of circular gastronomic recipes and tasting in Gorje by owner Mateja Reš, who is operating the Garden of Tastes (“Vrt okusov”), which acts as sustainable educational farm.

[Read more](#)

<https://www.interregeurope.eu/citisystem/news-and-events/news/4th-interregional-meeting-in-kranj-slovenia>



Pictures: Aleksandra Makshieva, Maria Rudekova, Katerina Medkova



# CITISYSTEM - Good Practices

During the CITISYSTEM kick-off meeting, the project partners and stakeholders worked together to define what a Good Practice (GP) within the project could be.

## We have published 12 Good Practices

[Click here to explore](#)

In terms of CITISYSTEM, a GP can be:

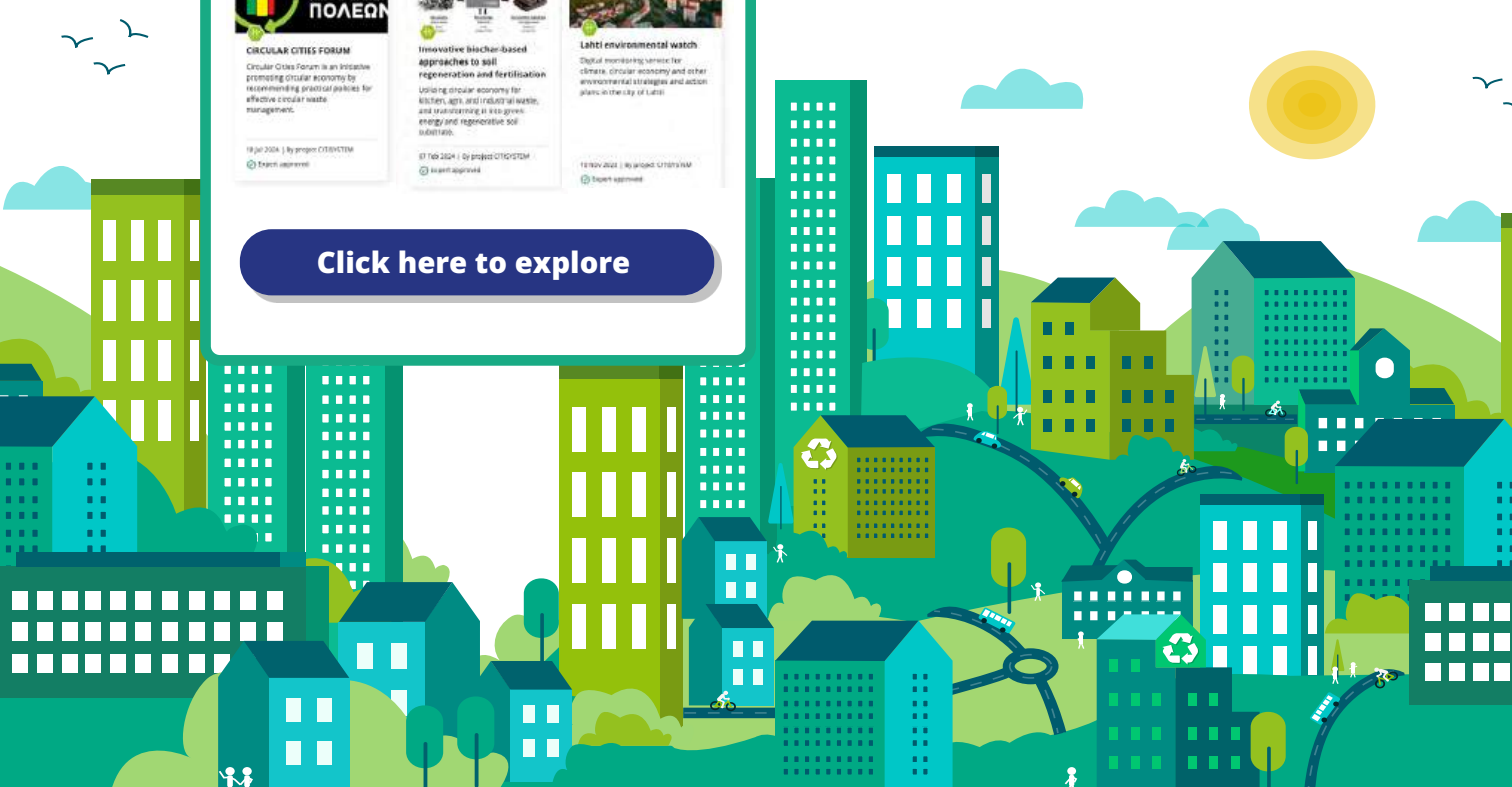
- practices
- tools & solutions (e.g., technology, digitalization, software)
- cooperation models
- ecosystems
- change in regulations/legislation
- educative actions

Next, we brainstormed on the related Interreg Europe GP features, e.g.:

- an initiative related to regional development policies (e.g., project, process, technique)
- proved to be successful (tangible and measurable results)
- transferable: interesting to other regions
- preferably achieved through public funding,

and we listed also CITISYSTEM specific features to support our selection to be:

- city (or region) level
- promoting sustainability
- related to biobased resources and processes
- systemic ('change of operating models, conditions for future sustainability')



## Thematic Webinar

**4<sup>th</sup> Thematic Webinar** on System/City-level Examples of Successful biowaste collection, processing and utilization for energy and compost took place as planned on 27<sup>th</sup> January 2025, hosted by BSC Slovenia.

[Read more](https://www.interregeurope.eu/citisystem/news-and-events/news/thematic-webinar-4-summary)

<https://www.interregeurope.eu/citisystem/news-and-events/news/thematic-webinar-4-summary>

## Survey

In 2023/2024, the CITISYSTEM team conducted a comprehensive survey on circular bioeconomy.

The first results were presented at the conference and published in the form of the expert paper, titled **Strategies Supporting Circular Bioeconomy in Selected EU**. The paper presents and uncovers the diverse approaches these areas employ in managing biobased resources, thus promoting circular bioeconomy and sustainable development. By examining the differences and commonalities among the selected cases, this paper provides valuable insights into the state of circular bioeconomy policies, the challenges faced, and the involvement of stakeholders in shaping local strategies.

[Read the paper \(p. 12\)](https://urn.fi/URN:ISBN:978-951-827-486-8)

<https://urn.fi/URN:ISBN:978-951-827-486-8>



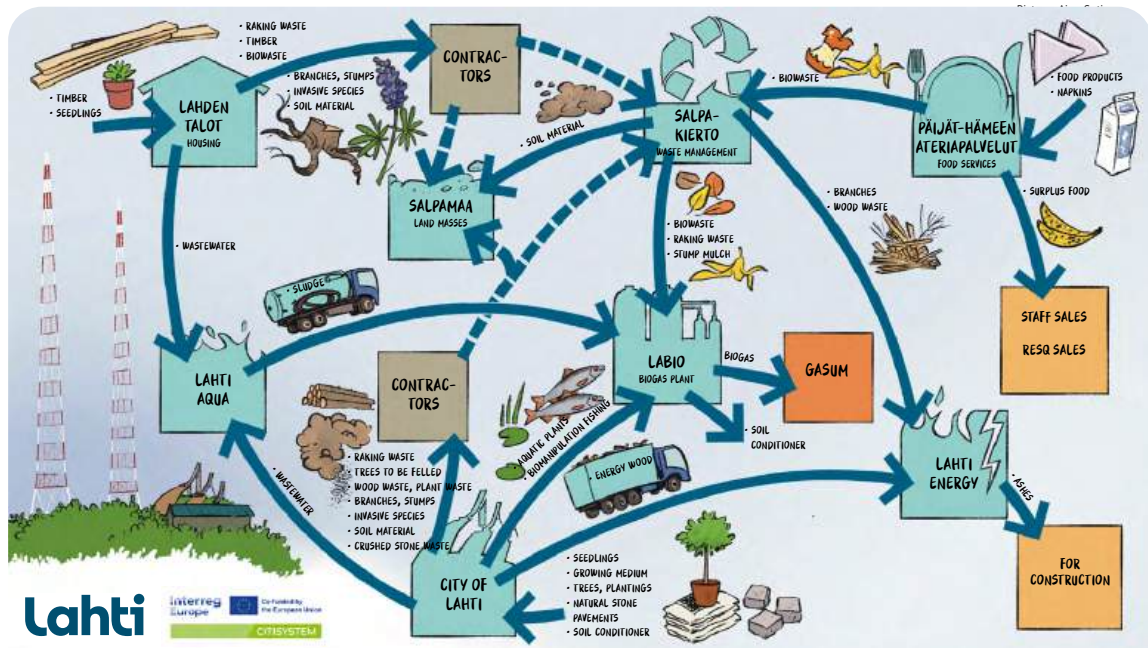
**Our first CITISYSTEM video is published!**

**Story of Circular Bioeconomy in Sustainable Cities**





# FINLAND



The City of Lahti organized a workshop in August 2024, inviting representatives from the city's group companies. The aim of the workshop was to create a common understanding of how bio-based materials circulate within the city group.

Each group company presented the incoming and outgoing flows of bio-materials in the workshop. Based on these, a comprehensive picture of the city's circular bioeconomy was formed.

The workshop discussed the current state of the circular bioeconomy and identified challenges. The main development areas selected were the reduction of food waste and coordination of land masses, for which further actions were planned.

## Lahti prepares commitment to the Circular Economy Green Deal

The City of Lahti is preparing a commitment related to the national Circular Economy Green Deal. This commitment will strengthen the implementation of the CE roadmap. The aim of the commitment is to promote the circular economy especially in city planning, public procurement and construction projects.

The City of Lahti organized a joint workshop in December, which included 8 participants from different city units. During the workshop participants discussed possible actions for city commitment. The most important, effective and additional measures to promote circularity were identified as well as indicators and responsible parties were named. These actions will be presented and modified in city management team meetings next year. The goal is to finalize the Green Deal commitment during the spring.

## CITISYSTEM showcased at CIBUS event in Hämeenlinna

At event of Interreg Europe project "Cutting food loss and waste in Europe" (CIBUS), the CITISYSTEM project was invited to present its approach to tackling food waste within the circular bioeconomy. Additionally, the Interreg Europe FISHH project was also showcased. By exchanging knowledge, policies, and good practices, all three projects aim to inspire cities and regions to implement systemic solutions for optimizing bioresource use, reducing waste, and promoting sustainability. Given the focus on food waste at the regional dissemination event in Lahti, we were pleased to invite our Finnish colleagues from both projects to contribute to the discussion.



### Regional Dissemination event in Lahti

<https://www.interregeurope.eu/citisystem/news-and-events/news/regional-dissemination-event-in-lahti-finland>

### Stakeholder event in Lahti

<https://www.interregeurope.eu/citisystem/news-and-events/news/stakeholder-event-in-lahti-finland>

### CIBUS project

<https://www.interregeurope.eu/cibus>

# SLOVAKIA

Although there have been no formal changes in policy instruments, the number of events in Slovakia focused on the greater deployment of renewable energy sources and energy communities is increasing. Slowly but steadily, mayors are becoming engaged in such initiatives and are working to involve their communities together with help of national associations.

One of the recent measures is the dramatic increase in fees for the collection and recycling of PET bottles, known as the “industry fee.” This fee has risen by 500–564%, depending on the color of the bottles, which may lead to their withdrawal from sale, especially in the case of green and blue bottles. In addition, manufacturers face a higher tax on sugary drinks and stricter European regulations on packaging recycling, which set ambitious targets for 2025 and 2030. These changes could help advance bioeconomy in Slovakia by promoting biodegradable and renewable packaging.

Picture: Technical University of Košice







Picture: Business support centre L.t.d., Kranj

## SLOVENIA

### Policy situation

It is likely that the Regional Development Program (RDP) for the Gorenjska region (2020–2027) will be improved, as the current document does not address bioeconomy challenges. The regional working group is exploring options for this improvement, given that any changes to the RDP must align with national legislation and be coordinated with the national ministry responsible for regional development.

Discussions with the national ministry are ongoing to define and implement the appropriate steps. It is anticipated that the development of an action plan could serve as a foundation for policy changes. While no formal modifications to the policy instrument have been made so far, there is potential for positive progress, including the preparation of a regional paper focused on bioeconomy. Work will soon begin on drafting the action plan to support this process.



# BELGIUM

## Introduction of selective biowaste collection and “pay as you throw system” for household waste

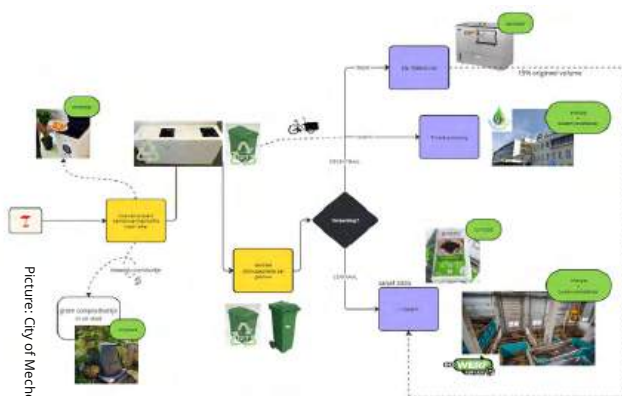
After the local elections of 13 October 2024, the new board of mayor and alderman in Mechelen promised a structural change to the policy plan 2025-2030 by introducing the selective collection of organic waste in 2026 (which is mandatory according to Flemish legislation) and a “Pay as you throw” system for all household waste. The aim is to reduce the mixed residual waste from households with 30% by 2030. Also, the city council wants to keep supporting neighborhood and home composting as a good practice. In order to prepare citizens for the structural change a large communication campaign was launched in cooperation with the intermunicipal waste company IVAREM. A sensibilization campaign towards citizens on the prevention of food loss, how to properly sort organic waste and composting is foreseen for 2025.



Figure 1: The “Can it be less” campaign to reduce mixed residual waste with 30% by 2030. © IVAREM

## Local stakeholder meeting Mechelen

The local stakeholder meeting of semester 4 was held online on 18 September 2024 with mainly stakeholders from the supra-local (Flemish) level. In total, 10 experts from several governmental institutions (Circular Flanders, VLAIO, EWI, ODE, OVAM, VWSG), midfield organization VLACO npo, the intermunicipal waste company (IVAREM) and Mezzo Energy participated. The planned actions from CITISYSTEM were presented and the expert shared their insights and advice. An interesting discussions was held on the capacity for biowaste processing in Flanders and the advantages and disadvantages of processing on different scales (central and decentral) concerning legislation and practicalities.



Picture: City of Mechelen

Figure 2: Flow chart with the different theoretical scenarios how to manage the biowaste collection from the city offices in Mechelen.

## Visit to local biogas digester in Amsterdam (Netherlands)

In November 2024, the city of Mechelen organized a visit to a production site in Amsterdam of small-scale biogas digesters to transform biowaste into energy, heat and compost. The digesters have the size of a sea container and can be placed near any existing larger building (such as hospitals, the Zoo, community swimming pool, etc.) to provide energy and/or be connected to the heat network of the building. With the support of the city of Mechelen (achieved policy change to the policy plan 2020-2024) Mezzo Energy is looking for a location in Mechelen to place such an installation which can be used to process the biowaste from the hospitality sector in the inner city. The local presence of the biogas digester allows biowaste to be collected and transported via sustainable urban logistics (cargo bikes).

## Good practice neighborhood composting

A second good practice was reported by the city of Mechelen: neighborhood composting. These good practices are supported by the city by means of Climate action subsidies (500-5.000 euros per project annually).





# GREECE

Picture: Region of Central Macedonia



## Policy Situation

The Regional Development Fund of Central Macedonia (RDFCM) and the Region of Central Macedonia (RCM) – Associated Policy Authority (APA), in collaboration with the Organization for Economic Co-operation and Development (OECD), organized a working meeting with the participation of 36 key stakeholders of Central Macedonia in Thessaloniki, on 3-5 July 2024 in Thessaloniki. This action was carried out in the framework of “The Circular Economy in Central Macedonia, Greece” case study of the “OECD Programme on the Circular Economy in Cities and Regions” and the “Circular Cities and Regions Initiative” (CCRI), in order to ascertain the level of implementation of the circular economy in the RCM and contribute to the acceleration of the circular economy transition in Central Macedonia.

Also, on July 2024, the Special Management Service for the Regional Operational Programme “Kentriki Makedonia” amended the call under title “Investments for the enhancement of the circular economy at local level in the settlements of Central Macedonia (green points - transferred projects)”, relating to the establishment of Green Points in 6 municipalities and the construction of Green Waste Management Points in 2 municipalities in Central Macedonia.

RDFCM participated in the 8th Conference of the Hellenic Solid Waste Management Association (HSWMA) on “Circular Cities and Solid Waste Management – The Challenges for Society, the Authorities, the State”, which took place last September in Athens. The conclusions and applicable proposals formulated in the context of the conference aiming at the transition to the circular economy are to be published in a special publication.

## Regional Dissemination Event

On February 3, 2025, the 2<sup>nd</sup> Regional Dissemination Event of the CITISYSTEM project took place at the New Hall of the Regional Council of Central Macedonia, organized by the Regional Development Fund of Central Macedonia and the Region of Central Macedonia (Associated Policy Authority).

The event brought together 40 experts, policymakers, and key stakeholders to discuss innovative solutions for sustainable urban development and circular economy practices.

During the event, participants had the opportunity to explore the progress of the project. Discussions focused on the evolution of separate bio-waste collection in Central Macedonia, with insights from Regional Association of Solid Waste Management Agencies for Central Macedonia, and the importance of preventing food waste along the value chain, as it was presented by representative of Boroume Organization, initiator and coordinator of the Alliance for the Reduction of Food Waste, a good practice on food waste prevention, which was highlighted by Regional Development Fund of Central Macedonia during the current semester, while the findings of the recent OECD study on circular economy in the region was analyzed too.

The event fostered discussions on smart waste management, food waste prevention, and sustainable urban planning. It highlighted the importance of collaboration between regional authorities, civil society, and research institutions in shaping a greener future for Central Macedonia.

### Stakeholder event

<https://www.interregeurope.eu/citisystem/news-and-events/news/regional-stakeholders-group-meeting-in-thessaloniki-greece>



Picture: Region of Central Macedonia



REGION OF CENTRAL MACEDONIA



# SPAIN

Picture: CERCA



## Policy Situation

CITISYSTEM has participated in an action of the capitalization project COMdeHORT that was executed in Catalonia (2022-2024, funded by Catalan Government and EU-Regional Funds for the Rural Development). The aim of this project is the capitalization of initiatives (companies, individuals, cooperatives, administration) to promote not only the decentralized composting, but also the use of the compost in horticulture.

CITISYSTEM is one of the projects described in a catalogue of 26 initiatives (from citizenship, companies and government bodies) that has been launched on October of this year.

## Read the catalogue

[https://www.irta.cat/wp-content/uploads/2023/01/Reguitzell-d'experiencies\\_COMDEHORT.pdf](https://www.irta.cat/wp-content/uploads/2023/01/Reguitzell-d'experiencies_COMDEHORT.pdf)

We expect that the document will act as a new lever for the development of policies to promote biowaste transformation (composting) and the use of the compost.

## Stakeholder meeting

On 10 February, took place a new meeting of the Catalan CITISYSTEM stakeholder network. This time, attendees were from the Ecological and Forestry Applications Research Centre (CREAF), the Department of Agriculture, Livestock, Fisheries and Food (DARPA), Catalan Agency for Waste (ARC), Catalan Institute of the Chemical Research (ICIQ), and the new partner (Institute of Agrifood Research and Technology, IRTA) that replace i-CERCA in the execution of this initiative in Catalonia.

Main points dealt with were sharing good practices in Catalonia and current/potential change of instruments or policies to enhance the management of the organic waste production and its appropriate use; we also started to plan a potential dissemination activity.



# CITISYSTEM Events

We plan to have every semester a thematic webinar.

**The 1<sup>st</sup> CITISYSTEM webinar was organized on 16.6.2023 by LAB.**

[Read the summary](#)

**The 2<sup>nd</sup> CITISYSTEM webinar was organized on 23.1.2024 by CERCA.**

[Read the summary](#)

**The 3<sup>rd</sup> Citisystem webinar was organized on 21.5.2024 by City of Mechelen**

[Read the summary](#)

## CITISYSTEM Core Phase Semester Periods:

Semester 1: 3–8/2023 FINLAND  
Semester 2: 9/2023–2/2024 SPAIN  
» Semester 3: 3–8/2024 BELGIUM  
» **Semester 4: 9/2024–2/2025 SLOVENIA**  
Semester 5: 3–8/2025 SLOVAKIA  
Semester 6: 9/2025–2/2026 GREECE

## Semester 4: 4<sup>th</sup> Thematic webinar

*The Webinar 4 was an opportunity to hear range of very insightful practices and approaches, that enriched the knowledge of 33 participants coming from partner organisations and stakeholders from CITISYSTEM regions.*

*Read more to discover content about supporting good examples on the community-level biobased circularity solutions with citizen groups as actors in the transition.*

[Read more](#)



# Dissemination events:



## Finland

### Open dissemination event

On February 19, 2025, local stakeholders provided an update on the state of food loss management in an open dissemination event held at Lahti City Hall. The event brought together in total 24 experts, key stakeholders and interested citizens. The presentations showed that significant progress has been made in Lahti in utilizing food waste, and the cooperation between various local actors has been strengthened.

In the presentations, the audience heard how the project **Work and Food** by the **Lahti Diaconia Institute** has successfully developed Lahti food aid model that also serves as a low-threshold employment platform. The project offers easily accessible support for those in need of food aid meanwhile improving job opportunities for those in difficult labor market situations and facilitating the recruitment of non-native workers. Project manager Riikka Flink lead the development of the Lahti's model for effective food aid. Surplus food is collected for example from schools and distributed to customers through various collection delivery points around the city.

Next, **Päijät-Hämeen Ateriapalvelut** (Päijät-Häme Food Services) presented the impressive result how they had been able to reduce food waste by nearly 5,400 kg in 2024 compared to the previous year. This improvement was made possible for example by implementing the **Hukka food waste program's** AI system in spring 2024. The system helps to predict food demand, ensuring that right amount of food is ordered and prepared. Additionally, food waste has been reduced by selling climate-friendly lunches and through **ResQ mobile application**, with over 15,000 surplus meal portions sold in 2024.

**Päijät-Hämeen Ateriapalvelut** has collaborated with the **Work and Food** project to make use of surplus food from certain multi-purpose centers. The partnership has been deemed effective, and the number of participating centers has increased. According to Outi Luukkonen, representative of **Päijät-Hämeen Ateriapalvelut**, interest in surplus food has grown to the point where there is not always food left for donation. The city youth services have also collected surplus food from schools for youth centers, which has proven to be very effective. School meals have been particularly well received by young people that are visiting local youth centers after school.

Impressive work to reduce food waste has been done also at **Salpaus Further Education Centre**, where surplus food is donated to students. In two years, the total amount of biowaste has decreased by 26 %. Student feedback has been encouraging, and the initiative has also reduced overproduction in the institution's restaurants. According to Head of Education Marko Viljamaa from Salpaus, about 10-60 students collect surplus food daily, with the highest demand after weekends on Mondays.

In addition, an interesting example from local retail operator **Osuuskauppa Hämeenmaa** showing the company's ambitious goal to halve the food waste from their operations by 2030. Hämeenmaa's Selection and Responsibility Manager Niina Toivonen presented various initiatives including demand forecasting, discount labeling, evening double discounts, and surplus food boxes that are all found to be effective measures. Hämeenmaa also donates food aid to organizations and charities.

## Greece

### 2<sup>nd</sup> dissemination event

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[Read more](https://www.interregeurope.eu/citisystem/news-and-events/news/2nd-regional-dissemination-event-in-thessaloniki-greece)

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# Upcoming in Semester 5:



## 5<sup>th</sup> Regional dissemination meeting

on 25–26 March 2025

Hosted by Technical University of Košice, Slovakia

**Theme:**  
Urban-rural biobased systems  
- cities operating with  
the surrounding region



## 5<sup>th</sup> Webinar

on urban-rural biobased systems, how to support the larger circular loops and the production of high-quality compost will take place in May-June 2025, stay tuned!

**May-June 2025**



Project partners and stakeholders at the Interregional meeting in Kranj, Slovenia. Picture: Helena Cvenkel

## Lead Partner Contact

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**Interreg Europe**



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